


R, Reporter; Q, Quencher; , DNA polymerase

Figure 3.1. TaqMan chemistry during PCR. (A) Polymerization, TaqMan MGB probes anneals specifically to the complementary target between the forward and reverse primers annealing sites; (B) Strand displacement; (C) Cleavage, as the amplification proceeds toward the probe hybridization site, the DNA polymerase will cleave only the probes that hybridized to the target; (D) Polymerization completed, this cleavage separates the reporter dye from the quencher dye resulting in the increase of fluorescence.